

REMARKS

This amendment is offered in response to the Office Action of October 25, 2006.

Proposed drawing corrections have been submitted. Formal drawings will be provided. No new matter has been added. The Applicant notes that reference sign 4091A appears at page 22, line 23; reference sign 515 appears at page 25, line 11 and reference sign 611 appears at page 27, line 21.

Likewise, the specification has been amended to remove references to the claims and to introduce numerals 308 and 4051B into the specification. No new matter has been added.

Non-elected claims 16-21, as well as claims 14 and 15, have been canceled, without prejudice or disclaimer.

The claims have been extensively amended to overcome the rejections under 35 U.S.C. §§101 and 112.

The Office Action rejected Claims 22-24 under 35 U.S.C. §102(b) as being anticipated by the Kumagai reference. However, Claim 22 has been rewritten to be dependent upon Claim 3. Therefore, the rejection of Claims 22-24 will be addressed along with the subsequent rejection.

The Office Action rejected Claims 1-6 and 9-13 under 35 U.S.C. §103(a) as being obvious over the Harvey reference (U.S. Patent No. 5,461,471) in view of the Dunne reference (U.S. Patent No. 6,212,480).

Harvey discloses an autocollimator and its use in connection with determining whether two planes are parallel.

However, neither Harvey nor Dunne, nor the introduction of Chapter 7 of Jenkins et al. referred to by the Examiner disclose or hint at the provision of an observation field stop comprising a wall member extending from the observation light receiver towards said lens,

In the Drawings:

Proposed drawing correction in red are enclosed. Formal drawings will be provided.

No new matter has been added.

wherein the wall member extends only a part of the distance between the observation light receiver and the lens as to limit said ray boundary of said observation beam while maintaining said overlap of said illumination beam and said observation beam inside the lens. Further, none of the above documents discloses the provision of field stops causing the illumination field and the observation field to have different sizes.

The observation field stop including the wall member as defined in claim 1 prevents light from the illumination channel or stray light from other light sources to enter into the observation channel thereby avoiding and/or reducing generation of false signals and thus increasing the accuracy of the measured coefficients of reflection. Furthermore, it ensures that observation and illumination fields of different sizes can be provided. This in turn reduces the influence of any misalignment of the retroreflectometer relative to the object. For example in the context of measuring reflections of road markings such misalignment may occur when the apparatus is placed on a road in the presence of conditions of debris and small particles on the road marking, or of texture, profiled road markings, or vertical curves of the road marking.

Harvey is not concerned with such a limitation of the ray boundary of the observation beam while maintaining said overlap of said illumination beam and said observation beam inside the lens, nor with the provision of observation and illumination fields of different sizes. On the contrary Harvey shows in Fig. 1 that the observation and illumination fields are identical. Furthermore, Harvey is not concerned with the avoidance of light from the light source reaching the eye piece, since Harvey is merely concerned with the location of the position of the light spot "I" rather than a quantitative measurement of a coefficient of reflection. On the contrary, Harvey discloses as one embodiment an autocollimator comprising a reflector 38 that deliberately reflects part of the illumination beam back towards

the eye piece, thus effectively teaching away from the subject-matter of the present invention. Hence, the skilled person does not find any hint in D1 as to the desirability of providing an observation field stop including a wall member as defined in claim 1.

Applicants appreciate that the introduction of Chapter 7 Jenkins et al. states in general terms the importance of field stops, and the importance of investigating the effect of already existing elements of a system. However, these statements do not provide any teaching as to how to design a field stop in a system, e.g. the system described by Harvey, so as to obtain an accurate apparatus for measuring a reflection coefficient. Hence, the skilled person being aware of the disclosure of Harvey and the introduction of Chapter 7 of Jenkins et al. would not in an obvious way arrive at an observation field stop comprising a wall member extending from the observation light receiver towards said lens, wherein the wall member extends only a part of the distance between the observation light receiver and the lens as to limit said ray boundary of said observation beam while maintaining said overlap of said illumination beam and said observation beam inside the lens, and at field stops causing the illumination field and the observation field to have different sizes. The introduction of Chapter 7 of Jenkins et al. does not even disclose any procedure as to how a skilled person would arrive at such a design.

Similarly, even though Dunne describes how a ranging device may be used as a device for measuring coefficients of retroreflectance, neither Dunne nor Harvey provide any motivation to modify an autocollimator (as disclosed in Harvey) so as to measure retroreflectance. Nevertheless, even if the skilled person would attempt such a modification, there is no disclosure or hint in neither Harvey nor Dunne as to how to design the field stops in order to provide an accurate measurement of retroreflectivity. In particular, there is no teaching or motivation to provide a field stop including a wall member that extends from the

observation light receiver only part of the distance towards the lens.

It is therefore respectfully submitted that the claims are patentable over the cited references.

For all of the reasons above, it is respectfully submitted that all of the presently pending claims are in immediate condition for allowance. The Examiner is respectfully requested to withdraw the rejections of the claims, to enter the amendment, to allow the claims, and to pass this application to early issue.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ronald E. Brown", with a stylized flourish at the end.

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